NOAA
S 220

GENERAL NOTES

1. THIS DRAWING WAS DEVELOPED UNDER TAR SSI-041(04) BASED ON A SHIPCHECK CONDUCTED AT CASCADE GENERAL, INC. IN PORTLAND, OREGON ON APRIL 26-30, 2004, FOLLOWING THE ACTIVATION AND CONVERSION OF THE NOAA SHIP FAIRWEATHER.

2. THIS DRAWING SUPERSEDES REFERENCE NO. 1.

SHEET INDEX

SHT NO.	SHEET TITLE
1	TITLE SHEET
2	DATA SHEET
3	STARBOARD OUTBOARD PROFILE
4	INBOARD PROFILE
5	PLAN OF "A" DECK INNERBOTTOM & PLAN OF "B" DECK TANK TOP
6	PLAN OF "C" 2ND DECK
7	PLAN OF "D" MAIN DECK
8	PLAN OF "E" SUPERSTRUCTURE
9	PLAN OF "F" NAVIGATION BRIDGE & PLAN OF "G" TOP OF HOUSE

REVISIONS

REV	SHT	ZONE	ITEM	DESCRIPTION	DATE	APPD
A	2	12B	1	REV'D FUEL CAPACITY	10/04/04	RJH
	4	27C	2	ADDED FLAG LOCKER TO INBD PROFILE		
	5,6,7	VAR	3	MODIFIED SPACE DESIGNATIONS		
	5	36B	4	REV'D COMPRESSOR LAYOUT		
	6	45B,C	5	REV'D ENG. RM STORAGE TANKS AND EQUIPMENT DESCRIPTIONS		
	7	56C	6	REV'D A-FRAME, DECK EQUIPMENT		
	9	69B	7	REMOVED LONG WIRE ANTENNA		
	9	68D	8	REV'D PORT SIDE DECK EXT'N LAYOUT		
	9	68D	9	REV'D BRIDGE EQUIPMENT DESCRIPTIONS		
B	VAR	VAR	1	SPACE DESIGNATION REVISIONS PER SHIP'S CREW COMMENTS, FEB 05	04/05/05	RJH
C	4,5	VAR	1	CONVERTED DO TANK A-08-001 TO AFT GRAYWATER TANK.	12/19/18	AAA
	4,5	VAR	2	CONVERTED DO TANK B-08-001 AND SEWAGE HOLDING TANK B-08-002 TO BE BLACKWATER TANK.		
	4,5	VAR	3	SPLIT DO TANK A-06-001 TO MAKE NEW BILGE WATER HOLDING TANK A-06-005.		
	2	13-B	4	UPDATED TANK CAPACITY TABLES.		

REFERENCES

NO	TITLE	DRAWING NO
1	BOOKLET OF GEN. PLANS	S0900-2-1
2	-	-
3	-	-
4	-	-
5	-	-

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE & AVIATION OPERATIONS

Seaworthy Systems, Inc.
P.O. BOX 965
ESSEX, CT 06426
TEL: (860) 767-9061

CONTRACT #
50-ABNA-0-00032
TAR-SSI-041-(04)

DSGN	-/-/--	
DWN	04/28/04	LAP
CHK	07/09/04	JEK
CHK	-/-/--	

NOAA APPROVAL

NOAA SHIP FAIRWEATHER

BOOKLET OF GENERAL PLANS

SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	FA-S0201-1	C

SCALE: AS NOTED | CAD FILENAME FA-S0201-1 SHT 1 OF 9

DECK MACHINERY

TYPE	MANUFACTURER	PULL\CAPACITY	QTY
FIXED LENGTH CRANE	SKAGIT	5,000 POUNDS	1
TELESCOPING BOOM CRANE	SKAGIT	2,500 POUNDS	2
CAPSTAN (AFT)	CLYDE	13,500 POUNDS	1
FANTAIL A–FRAME	--	8,000 POUNDS	1
FANTAIL J–FRAME	--	4,000 POUNDS	1
BOW CAPSTAN (ANCHOR WINDLASS)	--	---	1

ENGINEERING

TYPE	MANUFACTURER	RATING	QTY
MAIN PROPULSION (GEARED DIESEL)	GENERAL MOTORS	1,200 HP (EA)	2
AUXILIARY PROPULSION (BOW THRUSTER)	DETROIT DIESEL/BIRD JOHNSON	200 HP	1
PROPELLERS (3 BLADE/CONTROLLABLE PITCH)	BROWER	8'–6" DIAMETER	2
SHIP'S SERVICE GENERATORS (450 VAC)	DETROIT DIESEL/GE	300 KW	2
EMERGENCY GENERATOR (450 VAC)	DETROIT DIESEL/GE	75 KW	1
STEERING GEAR (ELECTRO–HYDRAULIC)	LIGERWOOD	– –	1

NOTE: ELECTRICAL SERVICE: 450 VAC 3 PHASE; 120 VAC 3 PHASE; 120 VAC SINGLE PHASE

LAUNCHES & SMALL BOATS

TYPE	PROPULSION	LENGTH	QTY
ALUMINUM OPEN BOAT (WORKBOAT) (MONARK)	GASOLINE OUTBOARD	17 FEET	1
TYPE I ALUMINUM HYDRO–SURVEY LAUNCH (JENSEN)	DIESEL	29 FEET	2
RIB–RESCUE ZODIAC	DIESEL	22 FEET	1
RIB–UTILITY AMBAR	DIESEL	7 METERS	1

ELECTRONICS

COMMUNICATIONS

VHF/FM TRANSCEIVERS
HF TRANSCEIVERS
EPIRB'S
EMERGENCY RADIO AUTO ALARM
PORTABLE EMERGENCY TRANSCEIVER
WEATHER FACSIMILE RECEIVER
GPS
IMARSAT

ACOUSTICS

ABISS IMO DEPTH SOUNDER
SHALLOW–WATER ECHO SOUNDER
HYDROGRAPHIC SURVEY SOUNDERS
RESON 8111 MULTI–BEAM
RESON 8160
SIDE SCAN SONAR

NAVIGATION

RADAR (X & S BAND)
GYROCOMPASS (2)
PRECISION POSITIONING EQUIPMENT (POS MV)

SCIENTIFIC EQUIPMENT

CTD SYSTEM (SHALLOW WATER)
SHIPBOARD ENVIRONMENTAL ACQUISITION SYSTEM (SEAS)
MOVING VESSEL PROFILER
DWS SSS WINCH
TSG (HULL MOUNT)

HABITABILITY

SINGLE STATEROOMS	24
DOUBLE STATEROOMS	17
SICK BAY	1
TOTAL BUNKS	58
CREW'S MESS SEATING	32

SCIENTIFIC LABORATORY FACILITIES

WET LAB (D–09–102)	218 Sq Ft
LAB #2 (D–07–102)	330 Sq Ft
COMP NETWORK (F–06–002)	191 Sq Ft
DATA PROCESSING CTR #1 (F–04–002)	340 Sq Ft
DATA PROCESSING CTR #2 (D–04–103)	146 Sq Ft

FRESHWATER SYSTEM

DISTILLERS (ALFA–LAVAL, MODEL JWP–26–C80)	2
MAXIMUM PRODUCTION	8,000 GPD
NORMAL CONSUMPTION	3,500 GPD
STORAGE CAPACITY	16,000 GALLONS

SEWAGE WASTE CONTROL △4 C

SYSTEM TYPE	ELECTROCATALYTIC
MANUFACTURER	OMNIPURE
HOLDING CAPACITY:	
GRAYWATER HOLDING TANK A–08–001	5,611 GALLONS
GRAYWATER HOLDING TANK A–04–001	1,846 GALLONS
FWD LIFT STATION TANK	313 GALLONS
AFT LIFT STATION TANK	253 GALLONS
BLACKWATER HOLDING TANK B–08–001	5,080 GALLONS

OILY WASTE CONTROL △4 C

SYSTEM TYPE	OILY WATER SEPARATOR
MANUFACTURER	PECO FACET
HOLDING CAPACITY A–06–005	2,299 GALLONS

FUEL SYSTEM △4 C

FUEL TYPE	#2 DIESEL
FUEL CONSUMPTION	120 GPH
FUEL CAPACITY	89,796 GALLONS

MISC. EQUIPMENT

STOCKLESS ANCHOR/3,000 LBS (EA)	2
1 3/8" STUD LINK CHAIN (165 FATHOMS)	2
WELIN LAMBIE DAVITS (SETS)	4
LIFE RAFTS (CAPACITY EACH SIDE)	150%
VEST 3600	1
VEST 2500	1

GENERAL CHARACTERISTICS

LENGTH OVERALL	231'–0"
LENGTH BETWEEN PERPENDICULARS	198'–0"
LENGTH DESIGN LOAD LINE	197'–0"
BREADTH (MOLDED)	42'–0"
DEPTH (MOLDED)	20'–0"
DEADWEIGHT	974 TONS
DISPLACEMENT	1,800 TONS
GROSS TONNAGE	1,591 TONS
NET TONNAGE	578 TONS
SPEED (CRUISE)	11 KNOTS
SPEED (MAX)	14.5 KNOTS

COMPLEMENT

COMMISSIONED OFFICERS	8
LICENSED OFFICERS	4
CREW	52
SCIENTISTS	6

GENERAL INFORMATION

LAUNCHED	MARCH 1967
DELIVERED	JANUARY 1968
COMMISSIONED	OCTOBER 1968
REACTIVATED (CASCADE GENERAL, INC., PORTLAND, OR.)	JUNE 2004
CALL LETTERS	WTEB
DESIGNER	MARITIME ADMINISTRATION
BUILDER	AEROJET–GENERAL SHIPYARDS JACKSONVILLE,FL.
SISTER SHIPS	RAINIER, MT. MITCHELL
HOME PORT	KETCHIKAN, AK
HULL	WELDED STEEL/ICE STRENGTHENED
ENDURANCE	22 DAYS
ENDURANCE CONSTRAINT	STABILITY
RANGE	5,898 NM

ABS CLASSIFICATION A1 Ⓔ ICE STRENGTHENED

PREPARED BY:
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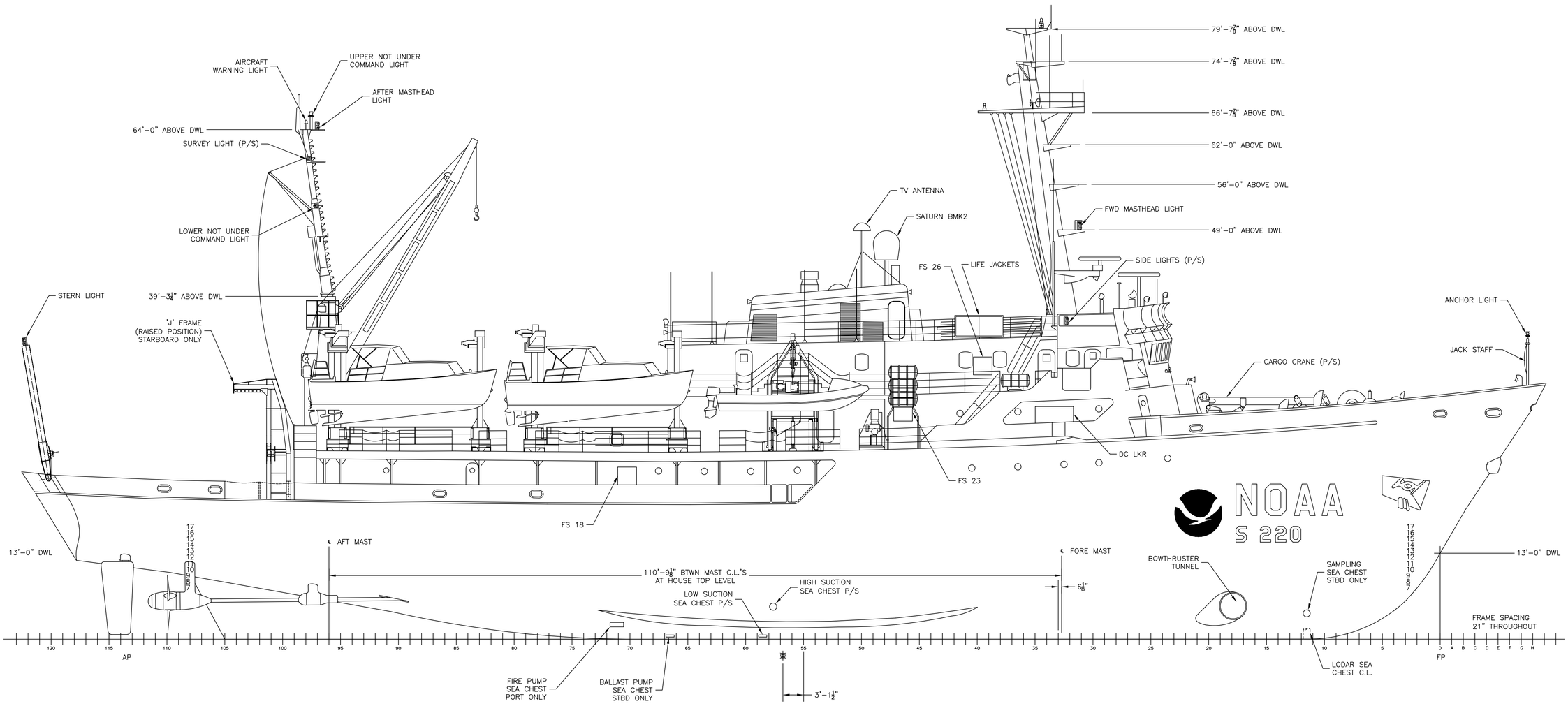
SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	FA–S0201–1	C
SCALE: AS SHOWN	CAD FILENAME FA-S0201-1	SHT 2 OF 9	



OUTBOARD PROFILE

MA DESIGN SI-MA-72A

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

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SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
D	0YLJ5	FA-S0201-1	B
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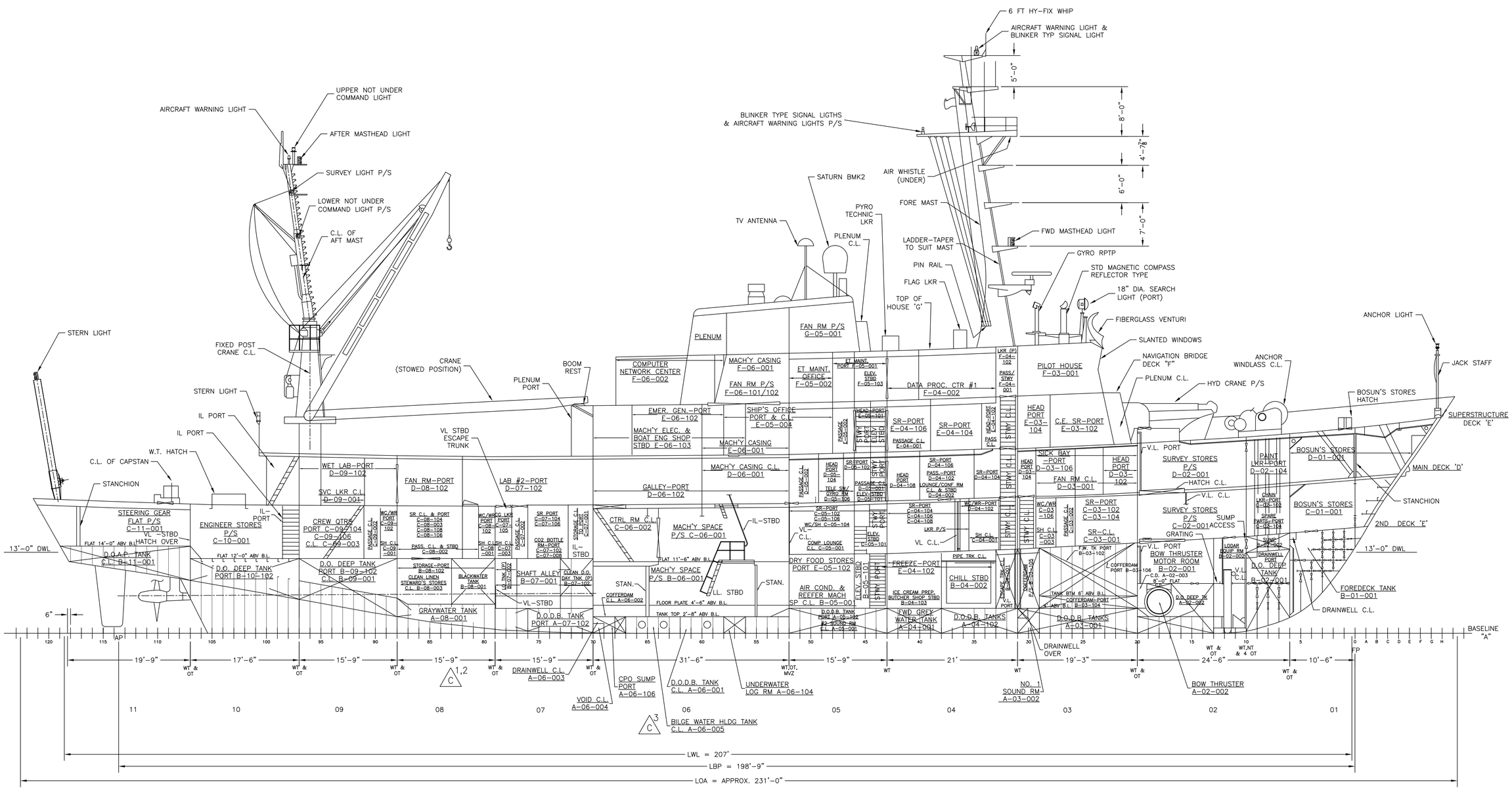

INBOARD PROFILE

MA DESIGN SI-MA-72A

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

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SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
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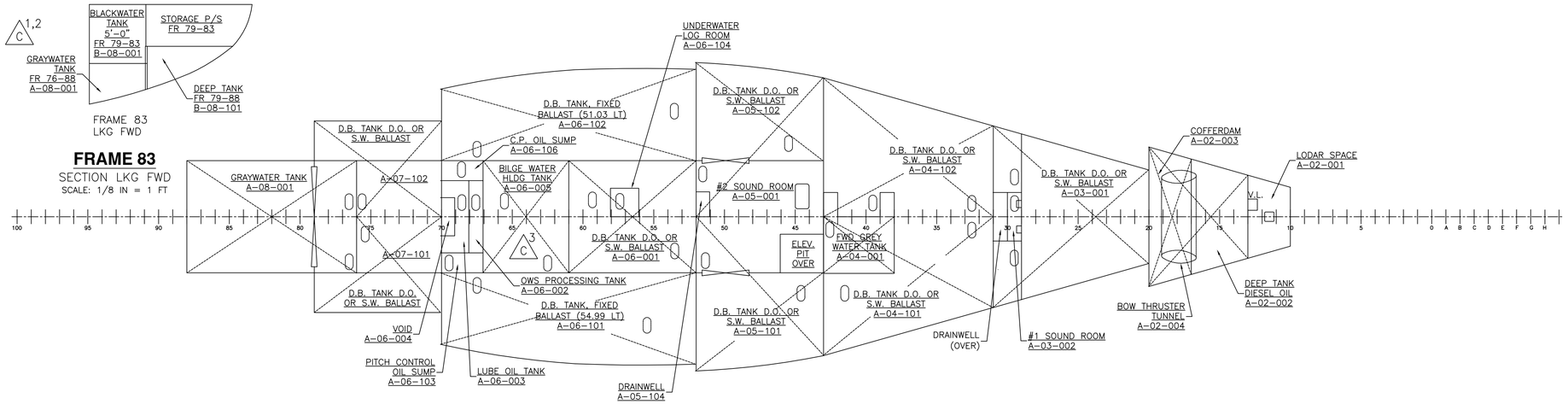
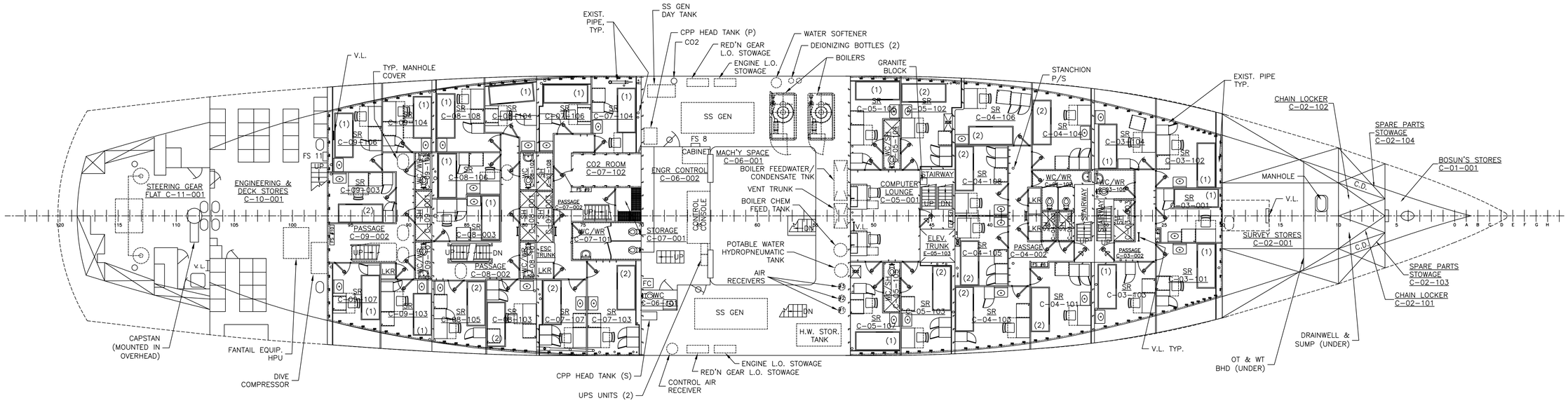


PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE D	CAGE CODE 0YLJ5	NOAA DRAWING NUMBER FA-S0201-1 REV C
	SCALE: AS SHOWN	CAD FILENAME FA-S0201-1	SHT 5 OF 9



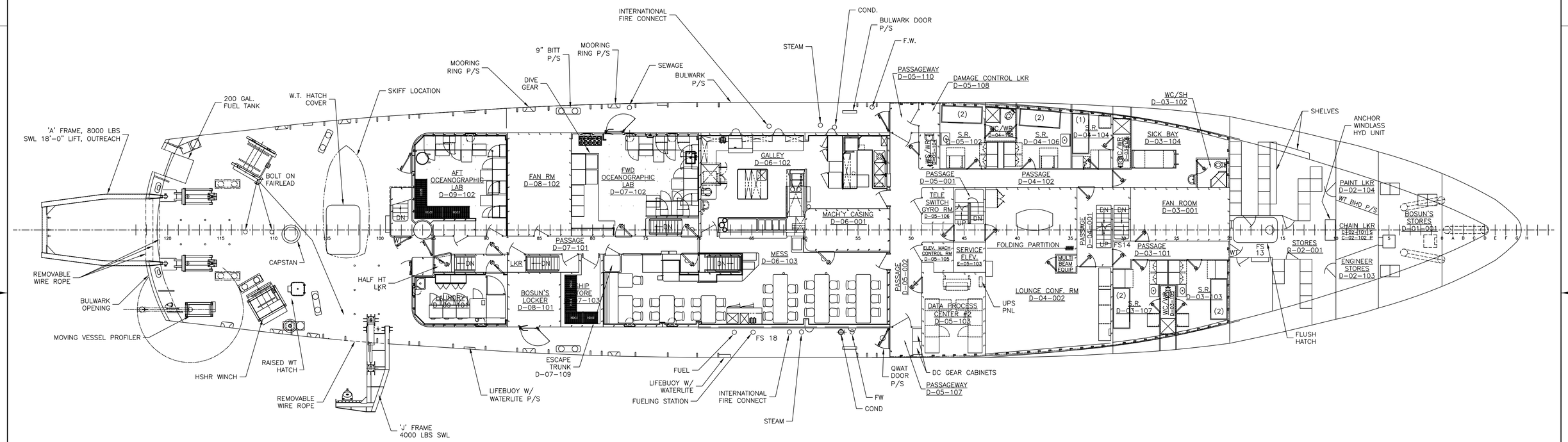
SECOND DECK

"C" DECK

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE: D	CAGE CODE: 0YLJ5	NOAA DRAWING NUMBER: FA-S0201-1 REV: B
	SCALE: AS SHOWN	CAD FILENAME: FA-S0201-1	SHT 6 OF 9



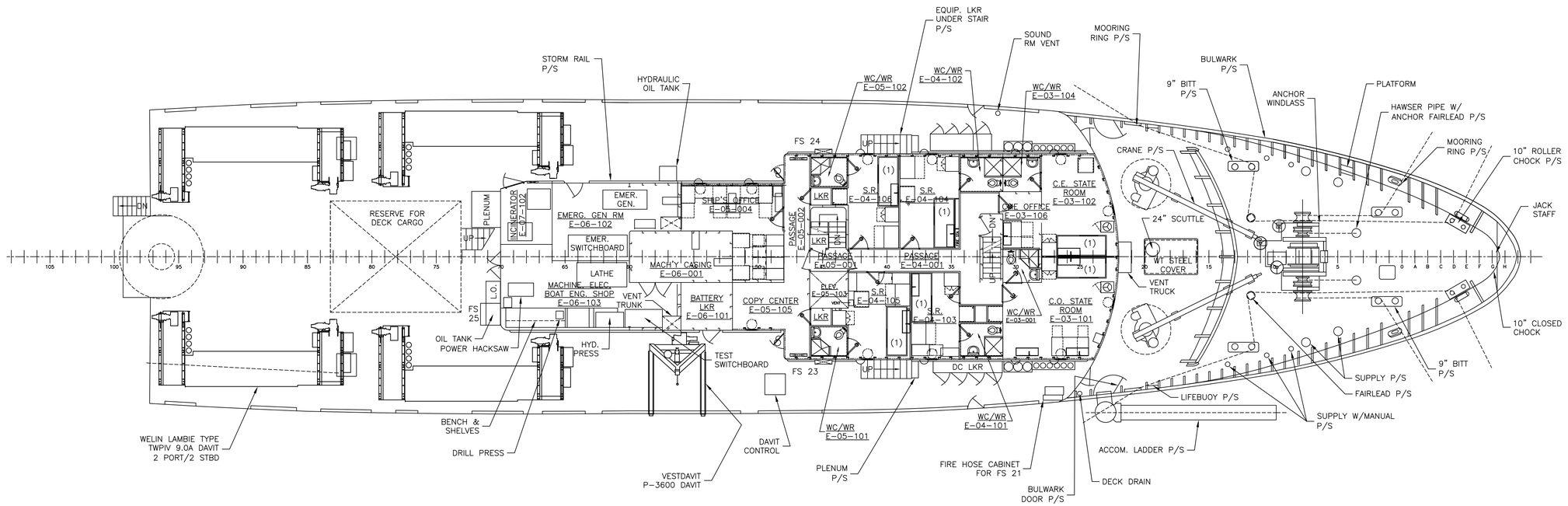
MAIN DECK

"D" DECK

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

PREPARED BY: Seaworthy Systems, Inc. ESSEX, CT 06426 TEL: (860) 767-9061	SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
	D	0YLJ5	FA-S0201-1	B
	SCALE: AS SHOWN	CAD FILENAME FA-S0201-1	SHT 7 OF 9	



SUPERSTRUCTURE

"E" DECK

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

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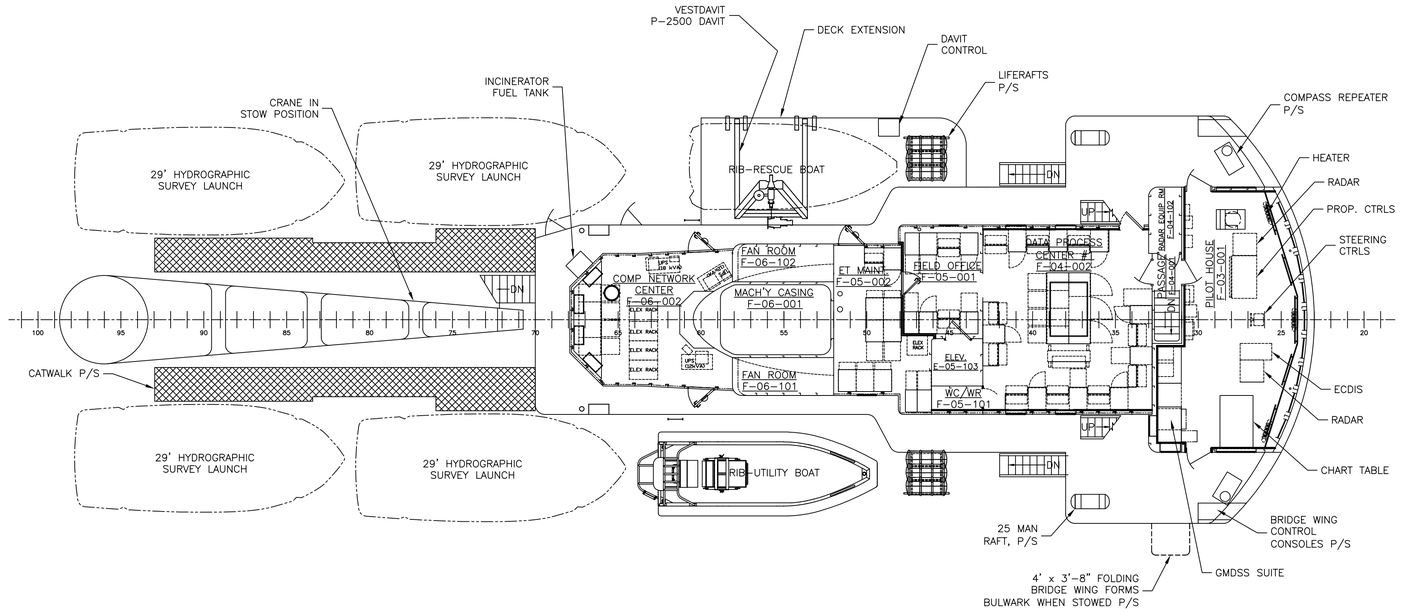
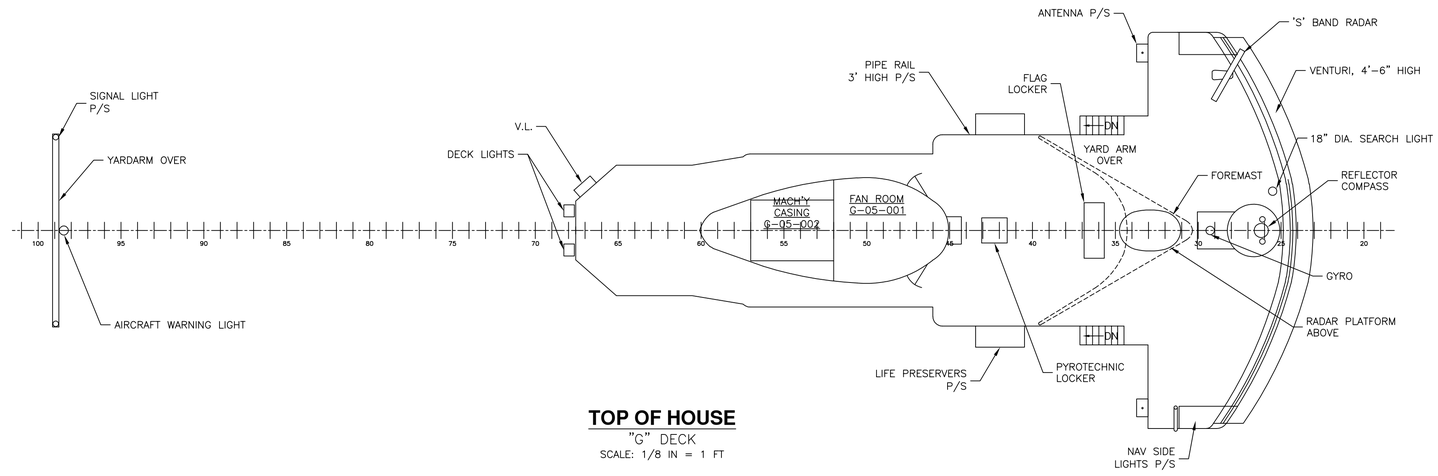


NAVIGATION BRIDGE

"F" DECK

SCALE: 1/8 IN = 1 FT



TOP OF HOUSE

"G" DECK

SCALE: 1/8 IN = 1 FT

1/8"=1'-0"

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	SCALE: AS SHOWN	CAD FILENAME FA-S0201-1	SHT 9 OF 9